

CLAIMS

1. A gas turbine engine nacelle comprising:
an inner skin terminating at an exhaust outlet; and
a radially outer skin surrounding said inner skin, and terminating at a recess in said inner skin extending into a closed cavity under said outer skin.
2. A nacelle according to claim 1 wherein said outer and inner skins converge aft and are axially interrupted by said recess therebetween.
3. A nacelle according to claim 2 wherein said cavity converges aft to said recess.
4. A nacelle according to claim 3 wherein said cavity includes a radial frame bridging said inner and outer skins forward of said recess.
5. A nacelle according to claim 2 wherein said inner skin is generally cylindrical under said recess.
6. A nacelle according to claim 5 wherein said recess blends into said inner skin aft thereof, and said outer and inner skins are axially coextensive across said recess in a common convergence thereacross.
7. A nacelle according to claim 2 wherein said recess extends in axial length over a minor portion of the distance to said exhaust outlet.
8. A nacelle according to claim 7 wherein said recess axial length is about 12 percent of the distance between the aft ends of said inner and outer skins.
9. A nacelle according to claim 2 wherein said cavity has an arcuate inlet at the aft end of said outer skin, with a flow area being a minor portion of the flow area for said exhaust outlet.

10. A nacelle according to claim 9 wherein said flow area for said cavity inlet is less than or equal to about 10 percent of the flow area for said exhaust outlet.
11. A nacelle according to claim 2 comprising a short nacelle surrounding a forward portion of a core engine to define a fan bypass duct therebetween terminating at said exhaust outlet disposed upstream from a separate outlet of said core engine.
12. A nacelle according to claim 2 comprising a long nacelle surrounding a core engine to define a common exhaust outlet at the aft end thereof for both core exhaust and fan bypass exhaust.
13. A gas turbine engine nacelle comprising:
 - an inner skin terminating at a converging boattail portion thereof having a nozzle outlet at an aft end thereof; and
 - a radially outer skin surrounding said inner skin forward of said boattail portion, and converging to a recess in said inner skin disposed upstream from said nozzle outlet, with said recess extending forward into a closed cavity under said outer skin.
14. A nacelle according to claim 13 wherein said cavity includes a radial frame bridging said inner and outer skins forward of said recess.
15. A nacelle according to claim 14 wherein said inner skin is generally cylindrical under said recess.
16. A nacelle according to claim 15 wherein said recess blends into said boattail portion aft thereof, and said outer and inner skins are axially coextensive across said recess in a common convergence thereacross.
17. A nacelle according to claim 16 wherein said recess extends in axial length over a

minor portion of the distance to said exhaust outlet.

18. A nacelle according to claim 17 wherein said cavity has an arcuate inlet at the aft end of said outer skin, with a flow area being a minor portion of the flow area for said exhaust outlet.

19. A nacelle according to claim 18 wherein said recess axial length is about 12 percent of the distance between the aft ends of said inner and outer skins.

20. A nacelle according to claim 19 wherein said flow area for said cavity inlet is less than or equal to about 10 percent of the flow area for said exhaust outlet.